



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/015,559

12/17/2001

Klaus Kramer

52049

6211

26474

7590

03/30/2006

NOVAK DRUCE DELUCA & QUIGG, LLP
1300 EYE STREET NW
SUITE 400 EAST
WASHINGTON, DC 20005

EXAMINER

WANG, SHENGJUN

ART UNIT

PAPER NUMBER

1617

DATE MAILED: 03/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/015,559

Applicant(s)

KRAMER ET AL.

Examiner

Shengjun Wang

Art Unit

1617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-9, 11 and 12 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 3-9, 11 and 12 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 30, 2005 has been entered.

Claim Rejections 35 U.S.C. 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3-9 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deckner et al. (EP 0 238 302, IDS), in view of Wechter et al. (US 6,048,891, 6,555,575).

3. Deckner et al. teaches a cosmetic, or topical composition comprising 6-hydroxy-2,5,7,8-tetramethyl-chroman-2-carboxylic acid in the amount of 0.01 to 50% as a free radical inhibitor and other well-known ingredients for topical compositions, such as humectant, emulsifier, and method of using the same for inhibiting generation of free radical in the skin. See, particularly, pages 2-4, and the claims.

4. Deckner et al. do not teach expressly the employment of 6-hydroxy-2,5,7,8-tetramethyl-chroman-2-ethylenecarboxylic acid.

5. However, Wechter et al. teaches that carboxylic derivatives of tocopherols are similarly useful as therapeutical agents, particularly, as antioxidants, or free radical inhibitors. See,

Art Unit: 1617

particularly, columns 6-11, 35-37 in '891. The length of the linker between the carboxyl moiety and chroman may be varied from a bond to five methylenes. See formula I in column 6, wherein m is defined as 0-5. Wechter et al. expressly teaches that 6-hydroxy-2,5,7,8-tetramethyl-chroman-2-ethylenecarboxylic acid (LUU- α) is useful as antioxidant agent. See, particularly, the claims in '575.

6. Therefore, it would have been prima facie obvious to a person of ordinary skill in the art, at the time the claimed the invention was made, to use 6-hydroxy-2,5,7,8-tetramethyl-chroman-2-ethylenecarboxylic acid in Deckner's cosmetic composition and use the same for protecting skin.

7. A person of ordinary skill in the art would have been motivated to use 6-hydroxy-2,5,7,8-tetramethyl-chroman-2-ethylenecarboxylic acid in Deckner's cosmetic composition and use the same for protecting skin because carboxylic derivatives of tocopherols in general, and 6-hydroxy-2,5,7,8-tetramethyl-chroman-2-ethylenecarboxylic acid in particular, are known to be similarly useful as antioxidants, or free radical inhibitors.

Response to the Arguments

The declaration under 35 U.S.C. 1.132 by Dr. Haremza, and applicants' remarks submitted December 30, 2005 have been fully considered, but are not persuasive.

8. The declaration under 37 CFR 1.132 filed December 30, 2005 is insufficient to overcome the rejection of claims 3-9 and 11-12 based upon Deckner et al. (EP 0 238 302, IDS), in view of Wechter et al. as set forth in the last Office action because: the evidences presented in the declaration are not sufficient to rebut the prima facie case of obviousness for the following reasons:

Art Unit: 1617

9. The results are not unexpected. Note that any differences between the claimed invention and the prior art may be expected to result in some differences in properties. The issue is whether the properties differ to such an extent that the difference is really unexpected. In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The declaration shows that 6-hydroxy-2,5,7,8-tetramethyl-chroman-2-ethylenecarboxylic acid (CEHC, or LLU- α) has better antioxidative activity than vitamin E and 6-hydroxy-2,5,7,8-tetramethyl-chroman-2-carboxylic acid. However, such superiority would have been obvious to one of ordinary skill in the art, particularly, in view of Wechter's teaching. Wechter et al. teaches that carboxylic derivatives of tocopherols are similarly useful as therapeutical agents, particularly, as antioxidants, or free radical inhibitors. See, particularly, columns 6-11, 35-37 in '891. The length of the linker between the carboxyl moiety and chroman may be varied from a bond to five methylenes. See formula I in column 6, wherein m is defined as 0-5. Wechter et al. expressly teaches that 6-hydroxy-2,5,7,8-tetramethyl-chroman-2-ethylenecarboxylic acid (LUU- α) is useful as antioxidant agent. Therefore, Wechter teaches that LUU- α is the preferred species for antioxidants, and has fairly suggested that LUU- α is better than 6-hydroxy-2,5,7,8-tetramethyl-chroman-2-carboxylic acid as antioxidant or free radical inhibitor. Further, Wechter teaches that LUU- α is a better free radical inhibitor than α -tocopherol. See examples 27 in columns 36-37.

10. Regarding the establishment of unexpected results, a few notable principles are well settled. It is applicant's burden to explain any proffered data and establish how any results therein should be taken to be unexpected and significant. Particularly, the evidence relied *>upon< should establish "that the differences in results are in fact unexpected and unobvious and of both statistical and practical significance." Ex parte Gelles, 22 USPQ2d 1318, 1319 (Bd.

Art Unit: 1617

Pat. App. & Inter. 1992). See MPEP 716.02 (b). The claims must be commensurate in the scope with any evidence of unexpected results. See MPEP 716.02 (d). As discussed above, the results as shown in the declaration are not unexpected.

Applicants' arguments that the claimed invention is allowable because there is an unexpected benefit residing in the claimed invention is deemed unpersuasive as a prima facie case of unexpected results has not been established.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shengjun Wang whose telephone number is (571) 272-0632. The examiner can normally be reached on Monday to Friday from 7:00 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan, can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SHENGJUN WANG
PRIMARY EXAMINER
Shengjun Wang
Primary Examiner
Art Unit 1617

Application/Control Number: 10/015,559

Page 6

Art Unit: 1617